RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/656, 894
Source: TFU90
Date Processed by STIC: 08/08/2005

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IFWO

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: US/10/656,894 TIME: 10:04:32

Input Set : D:\P-3558-US.txt

Output Set: N:\CRF4\08082005\J656894.raw

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3 <110> APPLICANT: Whitt, Michael
 5 <120> TITLE OF INVENTION: RECOMBINANT MUTANTS OF RHABDOVIRUS AND METHODS OF USE THEREO
 7 <130> FILE REFERENCE: P-3558-US
 9 <140> CURRENT APPLICATION NUMBER: 10/656,894
10 <141> CURRENT FILING DATE: 2003-09-08
12 <160> NUMBER OF SEQ ID NOS: 23
14 <170> SOFTWARE: PatentIn version 3.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 229
18 <212> TYPE: PRT
19 <213> ORGANISM: Vesicular stomatitis virus
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31 Ala Glu Tyr Ala Pro Ser Ala Pro Ile Asp Lys Ser Tyr Phe Gly Val
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35 Asp Glu Met Asp Thr Tyr Asp Pro Asn Gln Leu Arg Tyr Glu Lys Phe
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39 Phe Phe Thr Val Lys Met Thr Val Arg Ser Asn Arg Pro Phe Arg Thr
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43 Tyr Ser Asp Val Ala Ala Ala Val Ser His Trp Asp His Met Tyr Ile
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47 Gly Met Ala Gly Lys Arg Pro Phe Tyr Lys Ile Leu Ala Phe Leu Gly
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51 Ser Ser Asn Leu Lys Ala Thr Pro Ala Val Leu Ala Asp Gln Gly Gln
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55 Pro Glu Tyr His Thr His Cys Glu Gly Arg Ala Tyr Leu Pro His Arg
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59 Met Gly Lys Thr Pro Pro Met Leu Asn Val Pro Glu His Phe Arg Arg
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63 Pro Phe Asn Ile Gly Leu Tyr Lys Gly Thr Ile Glu Leu Thr Met Thr
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67 Ile Tyr Asp Asp Glu Ser Leu Glu Ala Ala Pro Met Ile Trp Asp His
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                                   185
71 Phe Asn Ser Ser Lys Phe Ser Asp Phe Arg Glu Lys Ala Leu Met Phe
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75 Gly Leu Ile Val Glu Lys Lys Ala Ser Gly Ala Trp Val Leu Asp Ser
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79 Ile Ser His Phe Lys
80 225
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83 <210> SEQ ID NO: 2

Input Set : D:\P-3558-US.txt

Output Set: N:\CRF4\08082005\J656894.raw

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Input Set : D:\P-3558-US.txt

Output Set: N:\CRF4\08082005\J656894.raw

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178					85	_	_		_	90			_ •		95	
	GIA	Met	Ala	_	ьуs	Arg	Pro	Phe	-	Lys	He	Leu	Ala		Leu	Gly
182	_	_	_	100	_	_ ~		_	105	•	_	_ •		110		
	Ser	Ser		Leu	Lys	Ala	Thr		Ala	Val	Leu	Ala	_	Gln	Gly	Gln
186			115					120			_		125			
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205	Phe	Asn	Ser	Ser	Lys	Phe	Ser		Phe	Arg	Glu	Lys	Ala	Leu	Met	Phe
206			195					200					205			
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224 225 228 229	Met 1 Ser	Ser	Ser	Leu Leu 20	Lys 5 Gly	Ile	Ala	Pro	Pro 25	10 Pro	Tyr	Glu	Glu	Asp 30	15 Thr	Ser
224 225 228 229 232 233	Met 1 Ser Met	Ser Lys Glu	Ser Lys Tyr 35	Leu Leu 20 Ala	Lys 5 Gly Pro	Ile Ser	Ala Ala	Pro Pro 40	Pro 25 Ile	10 Pro Asp	Tyr Lys	Glu Ser	Glu Tyr 45	Asp 30 Phe	15 Thr Gly	Ser Val
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224 225 228 229 232 233 236 237	Met 1 Ser Met Asp	Ser Lys Glu Glu 50	Ser Lys Tyr 35 Met	Leu 20 Ala Asp	Lys 5 Gly Pro Thr	Ile Ser Tyr	Ala Ala Asp 55	Pro Pro 40 Pro	Pro 25 Ile Asn	10 Pro Asp Gln	Tyr Lys Leu	Glu Ser Arg	Glu Tyr 45 Tyr	Asp 30 Phe Glu	15 Thr Gly Lys	Ser Val Phe
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224 225 228 229 232 233 236 237 240 241 244 245	Met 1 Ser Met Asp Phe 65 Tyr	Ser Lys Glu Glu 50 Phe	Ser Lys Tyr 35 Met Thr	Leu 20 Ala Asp Val	Lys 5 Gly Pro Thr Lys Ala 85	Ile Ser Tyr Met 70 Ala	Ala Ala Asp 55 Thr	Pro Pro 40 Pro Val	Pro 25 Ile Asn Arg Ser	10 Pro Asp Gln Ser His 90	Tyr Lys Leu Asn 75 Trp	Glu Ser Arg 60 Arg	Glu Tyr 45 Tyr Pro	Asp 30 Phe Glu Phe Met	15 Thr Gly Lys Arg Tyr 95	Ser Val Phe Thr 80 Ile
224 225 228 229 232 233 236 237 240 241 244 245 248	Met 1 Ser Met Asp Phe 65 Tyr	Ser Lys Glu Glu 50 Phe	Ser Lys Tyr 35 Met Thr	Leu 20 Ala Asp Val Val	Lys 5 Gly Pro Thr Lys Ala 85	Ile Ser Tyr Met 70 Ala	Ala Ala Asp 55 Thr	Pro Pro 40 Pro Val	Pro 25 Ile Asn Arg Ser	10 Pro Asp Gln Ser His 90	Tyr Lys Leu Asn 75 Trp	Glu Ser Arg 60 Arg	Glu Tyr 45 Tyr Pro	Asp 30 Phe Glu Phe Met	15 Thr Gly Lys Arg Tyr 95	Ser Val Phe Thr 80 Ile
224 225 228 229 232 233 236 237 240 241 244 245 248 249	Met 1 Ser Met Asp Phe 65 Tyr	Ser Lys Glu Glu 50 Phe Ser Met	Ser Lys Tyr 35 Met Thr Asp	Leu 20 Ala Asp Val Val Gly 100	Lys 5 Gly Pro Thr Lys Ala 85 Lys	Ile Ser Tyr Met 70 Ala Arg	Ala Asp 55 Thr Ala Pro	Pro Pro 40 Pro Val Val Phe	Pro 25 11e Asn Arg Ser Tyr 105	10 Pro Asp Gln Ser His 90 Lys	Tyr Lys Leu Asn 75 Trp	Glu Ser Arg 60 Arg Asp	Glu Tyr 45 Tyr Pro His Ala	Asp 30 Phe Glu Phe Met Phe	15 Thr Gly Lys Arg Tyr 95 Leu	Ser Val Phe Thr 80 Ile
224 225 228 229 232 233 236 237 240 241 244 245 248 249 252	Met 1 Ser Met Asp Phe 65 Tyr	Ser Lys Glu Glu 50 Phe	Ser Lys Tyr 35 Met Thr Asp Ala Asn	Leu 20 Ala Asp Val Val Gly 100	Lys 5 Gly Pro Thr Lys Ala 85 Lys	Ile Ser Tyr Met 70 Ala Arg	Ala Asp 55 Thr Ala Pro	Pro Pro 40 Pro Val Val Phe Pro	Pro 25 11e Asn Arg Ser Tyr 105	10 Pro Asp Gln Ser His 90 Lys	Tyr Lys Leu Asn 75 Trp	Glu Ser Arg 60 Arg Asp	Glu Tyr 45 Tyr Pro His Ala Asp	Asp 30 Phe Glu Phe Met Phe	15 Thr Gly Lys Arg Tyr 95 Leu	Ser Val Phe Thr 80 Ile
224 225 228 229 232 233 236 237 240 241 245 248 249 252 253	Met 1 Ser Met Asp Phe 65 Tyr Gly Ser	Ser Lys Glu Slu 50 Phe Ser Met Ser	Ser Lys Tyr 35 Met Thr Asp Ala Asn 115	Leu 20 Ala Asp Val Val Gly 100 Leu	Lys 5 Gly Pro Thr Lys Ala 85 Lys Lys	Ile Ser Tyr Met 70 Ala Arg	Ala Asp 55 Thr Ala Pro	Pro Pro 40 Pro Val Val Phe Pro 120	Pro 25 Ile Asn Arg Ser Tyr 105 Ala	10 Pro Asp Gln Ser His 90 Lys Val	Tyr Lys Leu Asn 75 Trp Ile Leu	Glu Ser Arg 60 Arg Asp Leu Ala	Glu Tyr 45 Tyr Pro His Ala Asp 125	Asp 30 Phe Glu Phe Met Phe 110 Gln	15 Thr Gly Lys Arg Tyr 95 Leu Gly	Ser Val Phe Thr 80 Ile Gly Gln
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224 225 228 229 232 233 236 237 240 241 244 245 248 249 252 253 256 257	Met 1 Ser Met Asp Phe 65 Tyr Gly Ser Pro	Ser Lys Glu 50 Phe Ser Met Ser Glu 130	Ser Lys Tyr 35 Met Thr Asp Ala Asn 115 Tyr	Leu 20 Ala Asp Val Val Gly 100 Leu His	Lys 5 Gly Pro Thr Lys Ala 85 Lys Lys Thr	Ile Ser Tyr Met 70 Ala Arg Ala His	Ala Asp 55 Thr Ala Pro Thr Cys 135	Pro 40 Pro Val Val Phe Pro 120 Glu	Pro 25 Ile Asn Arg Ser Tyr 105 Ala	10 Pro Asp Gln Ser His 90 Lys Val Arg	Tyr Lys Leu Asn 75 Trp Ile Leu Ala	Glu Ser Arg 60 Arg Asp Leu Ala Tyr 140	Glu Tyr 45 Tyr Pro His Ala Asp 125 Leu	Asp 30 Phe Glu Phe Met Phe 110 Gln	15 Thr Gly Lys Arg Tyr 95 Leu Gly	Ser Val Phe Thr 80 Ile Gly Gln Arg
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224 225 228 232 233 236 237 240 241 244 245 248 249 252 253 256 257 260 261	Met 1 Ser Met Asp Phe 65 Tyr Gly Ser Pro Met 145	Ser Lys Glu Slu So Phe Ser Met Ser Glu 130 Gly	Ser Lys Tyr 35 Met Thr Asp Ala Asn 115 Tyr Lys	Leu 20 Ala Asp Val Val Gly 100 Leu His	Lys 5 Gly Pro Thr Lys Ala 85 Lys Lys Thr	Ile Ser Tyr Met 70 Ala Arg Ala His	Ala Asp 55 Thr Ala Pro Thr Cys 135 Met	Pro 40 Pro Val Val Phe Pro 120 Glu Leu	Pro 25 Ile Asn Arg Ser Tyr 105 Ala Gly Asn	10 Pro Asp Gln Ser His 90 Lys Val Arg	Tyr Lys Leu Asn 75 Trp Ile Leu Ala Pro 155	Glu Ser Arg 60 Arg Asp Leu Ala Tyr 140 Glu	Glu Tyr 45 Tyr Pro His Ala Asp 125 Leu His	Asp 30 Phe Glu Phe Met 110 Gln Pro	15 Thr Gly Lys Arg Tyr 95 Leu Gly His	Ser Val Phe Thr 80 Ile Gly Gln Arg Arg 160
224 225 228 229 232 233 236 237 240 241 244 245 252 253 256 257 260 261 264	Met 1 Ser Met Asp Phe 65 Tyr Gly Ser Pro Met 145	Ser Lys Glu 50 Phe Ser Met Ser Glu 130	Ser Lys Tyr 35 Met Thr Asp Ala Asn 115 Tyr Lys	Leu 20 Ala Asp Val Val Gly 100 Leu His	Lys 5 Gly Pro Thr Lys Ala 85 Lys Lys Thr Pro Gly	Ile Ser Tyr Met 70 Ala Arg Ala His	Ala Asp 55 Thr Ala Pro Thr Cys 135 Met	Pro 40 Pro Val Val Phe Pro 120 Glu Leu	Pro 25 Ile Asn Arg Ser Tyr 105 Ala Gly Asn	10 Pro Asp Gln Ser His 90 Lys Val Arg Val Thr	Tyr Lys Leu Asn 75 Trp Ile Leu Ala Pro 155	Glu Ser Arg 60 Arg Asp Leu Ala Tyr 140 Glu	Glu Tyr 45 Tyr Pro His Ala Asp 125 Leu His	Asp 30 Phe Glu Phe Met 110 Gln Pro	15 Thr Gly Lys Arg Tyr 95 Leu Gly His Arg	Ser Val Phe Thr 80 Ile Gly Gln Arg Arg 160
224 225 228 232 233 236 237 240 241 244 245 253 256 257 260 261 264 265	Met 1 Ser Met Asp Phe 65 Tyr Gly Ser Pro Met 145 Pro	Ser Lys Glu Slu So Phe Ser Met Ser Glu 130 Gly Phe	Ser Lys Tyr 35 Met Thr Asp Ala Asn 115 Tyr Lys Asn	Leu 20 Ala Asp Val Val Gly 100 Leu His Thr	Lys 5 Gly Pro Thr Lys Ala 85 Lys Lys Thr Pro Gly 165	Ile Ser Tyr Met 70 Ala Arg Ala His Pro 150 Leu	Ala Asp 55 Thr Ala Pro Thr Cys 135 Met Tyr	Pro 40 Pro Val Val Phe Pro 120 Glu Leu Lys	Pro 25 Ile Asn Arg Ser Tyr 105 Ala Gly Asn	10 Pro Asp Gln Ser His 90 Lys Val Arg Val Thr	Tyr Lys Leu Asn 75 Trp Ile Leu Ala Pro 155 Ile	Glu Ser Arg 60 Arg Asp Leu Ala Tyr 140 Glu Glu	Glu Tyr 45 Tyr Pro His Ala Asp 125 Leu His	Asp 30 Phe Glu Phe Met Phe 110 Gln Pro Phe	15 Thr Gly Lys Arg Tyr 95 Leu Gly His Arg Met	Ser Val Phe Thr 80 Ile Gly Gln Arg 160 Thr
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Input Set : D:\P-3558-US.txt

Output Set: N:\CRF4\08082005\J656894.raw

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287 <213> ORGANISM: Vesicular stomatitis virus
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294 attgacaaat cctattttgg agttgacgag gctgacacct atgatccgaa tcaattaaga
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296 tatgagaaat tettetttac agtgaaaatg acggttagat etaategtee gtteagaaca
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298 tactcagatg tggcagccgc tgtatcccat tgggatcaca tgtacatcgg aatggcaggg
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300 aaacgtccct tctacaaaat cttggctttt ttgggttctt ctaatctaaa ggccactcca
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304 ttgccacata ggatggggaa gacccctccc atgctcaatg taccagagca cttcagaaga
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310 ttcagagaga aggcettaat gtttggeetg attgtegaga aaaaggeate tggagegtgg
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330 Leu Val Glu Gly Trp Phe Ser Ser Trp Lys
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335 <211> LENGTH: 42
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Input Set : D:\P-3558-US.txt

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431 <212> TYPE: PRT
432 <213> ORGANISM: Vesicular stomatitis virus
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VERIFICATION SUMMARY

DATE: 08/08/2005 TIME: 10:04:33

PATENT APPLICATION: US/10/656,894

Input Set : D:\P-3558-US.txt
Output Set: N:\CRF4\08082005\J656894.raw